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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,698	09/29/2003	Tong-Ming Lee	15436.187	4165
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Workman Nydegger 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, UT 84111				
EXAMINER				
PICH, PONNOREAY				
ART UNIT		PAPER NUMBER		
2435				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/673,698

**Applicant(s)**

LEE ET AL.

**Examiner**

PONNOREAY PICH

**Art Unit**

2435

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/11/09 and 6/30/09.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

#### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 6/11/09 and 6/30/09 have been entered.

Claims 31-48 are pending.

#### ***Response to Amendment and Arguments***

Applicant's amendments were fully considered. Applicant's arguments were also fully considered, but are moot in view of new rejections made below in response to the amendments.

The examiner notes that applicant requested an affidavit as per 37 CFR 1.104(d)(2) for support of the official notice to the limitation further recited in claim 39. Applicant requested that the affidavit discuss the any and all references upon which the obviousness rejection of claim 39 is based. As per MPEP 2144.03(C), the examiner notes that an affidavit is needed if the examiner relies on his/her own experience for support of the official notice upon request by applicant. However, the examiner also has the option of providing a reference as concrete support of the official notice instead of an affidavit. In such a case, there is no need to provide an affidavit for the reference

since the reference is not based on the examiner's own experience. In response to applicant's request of proof that the limitation recited further in claim 39 is well known, the examiner has provided a reference (Klein) as evidence--see below.

***Examiner's Comments with respect to "Computer Readable Medium"***

The examiner notes that the specification in paragraph 46 defines that a computer readable medium could be a "communication connection". Read in light of the specification as a whole, the examiner does not believe that one skilled would have viewed a "communication connection" as a signal per se as a communication connection in a network cannot be obtained using signals alone. In Figure 5, for example, the hardware device, Wireless I/O 506, appears to be used to create one end of a communication connection. As such, "computer-readable medium" as claimed is being interpreted to include only statutory media and not signals per se. If applicant disagrees with this assessment, clarification is respectfully requested.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31-48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Claim 31 recites in line 9, "...each is associated with a distinct group...". It is unclear to what "each" refers—a keyset or a key in the set of multiple keys. Claims 42 and 44 each have a similar problem in their respective last clause.
2. "the first identifier" and "the second identifier" in claim 41 lack antecedent basis.
3. Claims not specifically addressed are rejected due to dependency.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31, 33, 35-38, 41-45, and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balogh (US 2001/0023446) in view of applicant's admitted prior art (herein "AAPA") as discussed in the specification of the current application.

#### **Claim 31:**

Balogh discloses:

1. Displaying an interface for keyset profile management in a wireless network (paragraphs 36 and 42), the interface including:
  - a. A user-selectable option to select a keyset profile (i.e. information set), the selected keyset profile including a plurality of keysets associated with access points in a wireless network (paragraphs 27, 33, and 36).

- b. A user-selectable option to select a keyset (paragraphs 27, 29, 36, and 42). *Note that each information set can have multiple keys, each of which can be considered a keyset profile. Balogh's invention further provides for a way for the user to modify settings in the information set, which would include modifying a particular key in the information set. This means the user would be able to use the user interface to select and modify the keys stored in the information set. Different keys for different sub-networks could also be chosen.*

Balogh does not disclose wherein each of the keysets in the keyset profile includes a set of multiple keys and each is associated with a distinct group of one or more access points in the wireless network. As pointed out above, in Balogh's invention, each keyset in the keyset profile only has one key.

However, AAPA discloses that at the time applicant's invention was made, it was well known in the art that a keyset could include just one key (i.e. as in Balogh's invention) or it could include a set of multiple keys (paragraphs 11 and 15—i.e. *In wireless networking, typically four keys are included in a keyset*) and each is associated with a distinct group of one or more access points in the wireless network (Figures 1 and 2B and paragraphs 11, 15, and 21). Note that in Figure 2B, ESS<sub>2</sub> can be considered to define a wireless network, whereas each BSS defines subnetworks of the wireless network. BSS<sub>2</sub> uses a different access point and associated keyset than BSS<sub>1</sub>.

At the time applicant's invention was made, it would have been obvious to one skilled in the art to modify Balogh's invention according to the limitations recited in claim 1 by having each of the keysets in Balogh's keyset profile include a set of multiple keys as per AAPA's teachings (rather than a single key) and each is associated with a distinct group of one or more access points in the wireless network. The rationale for why it is obvious is that doing so is nothing more than simple substitution of one known element (i.e. type of keyset) for another (i.e. another type of keyset) to obtain predictable results.

**Claim 33:**

Balogh further discloses wherein the interface further includes a keyset editing region that includes information regarding one or more keys in the selected keyset (Fig 2 and paragraphs 27 and 42).

**Claim 35:**

Balogh further discloses wherein the keyset editing region includes an option to add and/or update data associated with the selected keyset (paragraphs 27 and 42).

**Claim 36:**

Balogh further discloses wherein the interface further includes an option to associate a keyset with a selected keyset profile (paragraphs 42 and Fig 2).

The keyset profile could be referred to by name in Balogh's invention. Since the user can edit the specific key referred to by a name, the user has the option to associate the specific key with a specific name.

**Claim 37:**

Balogh further discloses wherein the associated keyset is user-defined through the interface (paragraph 42).

**Claim 38:**

Balogh further discloses wherein the associated keyset is user-selected through the interface (paragraphs 27, 36, 38, and 42).

**Claim 41:**

Balogh-AAPA discloses all the limitations recited in claim 31. AAPA further discloses wherein the wireless network (i.e. as defined by ESS<sub>2</sub> in Fig 2B and discussed in paragraph 21) includes first and second wireless sub-networks each having associated wireless identifier (i.e. Fig 2B, BSS<sub>1</sub> and BSS<sub>2</sub>), and wherein the group of one or more access points (i.e. Fig 2B, AP<sub>1</sub>) corresponding to a first one of the keysets (i.e. Fig 2B, Keyset<sub>1</sub>) are part of the first wireless sub-network identified with the first identifier (paragraph 21 and Fig 2B) and the group of one or more access points (i.e. Fig 2B, AP<sub>2</sub>) corresponding to a second one of the keysets (i.e. Fig 2B, Keyset<sub>2</sub>) are part of the second wireless sub-network identified with the second identifier (paragraph 21 and Fig 2B, BSS<sub>2</sub>).

**Claims 42 and 43:**

Balogh discloses a method and a computer readable medium having instructions being adapted to carry out the method of:

1. Decrypting, using a keyset profile, data captured by the wireless network analyzer from a plurality of access points in a wireless network (Fig 4 and paragraphs 22 and 27).



2. Displaying an interface adapted for management of the keyset profiles (paragraphs 33 and 42).
3. Wherein the displayed interface comprises user-selectable options to manage the keyset profile and to manage a keyset from among a plurality of keyset sin the keyset profile (paragraphs 33 and 42).

Balogh does not disclose wherein each of the keysets in the keyset profile includes a plurality of keys and each is associated with a distinct group of one or more access points in the wireless network. As pointed out above, in Balogh's invention, each keyset in the keyset profile only has one key.

However, AAPA discloses that at the time applicant's invention was made, it was well known in the art that a keyset could include just one key (i.e. as in Balogh's invention) or it could include a plurality of keys (paragraphs 11 and 15—i.e. *In wireless networking, typically four keys are included in a keyset*) and each is associated with a distinct group of one or more access points in the wireless network (Figures 1 and 2B and paragraphs 11, 15, and 21). Note that in Figure 2B, ESS<sub>2</sub> can be considered to define a wireless network, whereas each BSS defines subnetworks of the wireless network. BSS<sub>2</sub> uses a different access point and associated keyset than BSS<sub>1</sub>.

At the time applicant's invention was made, it would have been obvious to one skilled in the art to modify Balogh's invention according to the limitations recited in claims 42 and 43 by having each of the keysets in Balogh's keyset profile include a set a plurality of keys as per AAPA's teachings (rather than a single key) and each is

associated with a distinct group of one or more access points in the wireless network. The rationale for why it is obvious is that doing so is nothing more than simple substitution of one known element (i.e. type of keyset) for another (i.e. another type of keyset) to obtain predictable results.

**Claims 44 and 47:**

Balogh discloses a method and a computer readable medium having instructions being adapted to carry out the method of:

1. Receiving a first user selection indicating a keyset profile (paragraphs 27, 33, and 36).
2. Receiving a second user selection indicating a keyset from among a plurality of keysets in the selected keyset profile (paragraphs 27, 29, 36, and 42).
3. Capturing data from a wireless network at a wireless network analyzer (paragraph 35 and Fig 4).
4. Decrypting the captured data using the selected keyset (Fig 4 and paragraphs 22 and 27).

Balogh does not disclose wherein each of the keysets in the keyset profile includes a plurality of keys and each is associated with a distinct group of one or more access points in the wireless network. As pointed out above, in Balogh's invention, each keyset in the keyset profile only has one key.

However, AAPA discloses that at the time applicant's invention was made, it was well known in the art that a keyset could include just one key (i.e. as in Balogh's

invention) or it could include a plurality of keys (paragraphs 11 and 15—i.e. *In wireless networking, typically four keys are included in a keyset*) and each is associated with a distinct group of one or more access points in the wireless network (Figures 1 and 2B and paragraphs 11, 15, and 21). Note that in Figure 2B, ESS<sub>2</sub> can be considered to define a wireless network, whereas each BSS defines subnetworks of the wireless network. BSS<sub>2</sub> uses a different access point and associated keyset than BSS<sub>1</sub>.

At the time applicant's invention was made, it would have been obvious to one skilled in the art to modify Balogh's invention according to the limitations recited in claims 44 and 47 by having each of the keysets in Balogh's keyset profile include a set a plurality of keys as per AAPA's teachings (rather than a single key) and each is associated with a distinct group of one or more access points in the wireless network. The rationale for why it is obvious is that doing so is nothing more than simple substitution of one known element (i.e. type of keyset) for another (i.e. another type of keyset) to obtain predictable results.

**Claim 45:**

Balogh further discloses wherein the captured data is decrypted in real time (paragraph 22). WEP provides for real time decryption of data in a wireless network.

**Claim 48:**

Balogh-AAPA discloses the all the limitations of claim 31. AAPA further discloses wherein the group of one or more access points corresponding to a first one or more of the keysets and the group of one or more access points corresponding to a

second one of the keysets share a common network identifier (paragraph 21 and Fig 2B--they share ESS<sub>2</sub> as the common network identifier).

Claims 32, 34, 39-40 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balogh (US 2001/0023446) in view of applicant's admitted prior art (herein "AAPA") as discussed in the specification of the current application in further view of Klein (US 7,103,661).

**Claim 32:**

Balogh further discloses wherein the option to select the keyset comprises a keyset list and an option to set a keyset shown in the keyset list as the selected keyset (paragraphs 27, 36, and 42).

The limitation of displaying, through the interface, information regarding the selected keyset in response to user selection of the keyset is disclosed by Klein (Fig 6a). At the time applicant's invention was made, it would have been obvious to one skilled in the art to further modify Balogh's invention according to the limitations recited in claim 32 to display information regarding the selected keyset in response to the user selection of the keyset. One skilled would have been motivated to do so because it would allow the user to make an informed decision when attempting to modify a keyset, thus preventing accidental modification of the wrong keyset.

**Claim 34:**

As per the limitation of wherein the information regarding one or more keys in the selected keyset includes a user-editable list of keys in the selected keyset, it is

disclosed by Klein (Fig 6a). At the time applicant's invention was made, it would have been obvious to one skilled in the art to further modify Balogh's invention according to the limitations recited in claim 34. One skilled would have been motivated to provide the information regarding the one or more keys in the selected keysets in a user-editable list because use of a list to organize information for presentation to a user is an obvious design choice. Note that in Balogh's invention, the user is allowed to view and change the settings in an information set (paragraph 42), thus some way of presenting the keyset to the user for view and editing must already be used.

**Claim 39**

Balogh does not explicitly disclose wherein the interface further includes a user-selectable option to delete the selected keyset. However, Klein discloses an interface including a user-selectable option to delete a selected profile (col 10, lines 39-49). It would have been obvious to one skilled in the art to provide Balogh's user interface with a user-selectable option to delete the selected keyset. One skilled would have been motivated to do so because deletion of an option is a standard feature in any interface that allows for modification of the options and it allows for keysets that are no longer valid to be eliminated, which is required since all devices have limited memory.

**Claim 40:**

As per the limitation of wherein the interface further includes a user-selectable option to unselect the selected keyset, it is disclosed by Klein (Fig 6a and Fig 10). Note in Figure 6a, "Stanford University Campus" is selected. If the user click on "Stanford

Dorms", one skilled should appreciate that the keyset associated with "Stanford University Campus" would be unselected.

At the time applicant's invention was made, it would have been obvious to further modify Balogh's invention so as to include a user-selectable option to unselect the selected keyset. One skilled would have been motivated to do so because providing an unselect feature to any user interface allows accidental selections to be undone.

**Claim 46:**

The limitation of wherein receiving the second user selection includes displaying, to a user, a keyset list comprising the plurality of keysets in the selected keyset profile is disclosed by Klein (Fig 6a). At the time applicant's invention was made, it would have been obvious to one skilled in the art to modify Balogh's invention according to the limitations recited in claim 46. One skilled would have been motivated to display a keyset list upon second user selection because it would allow the user to easily see which keys are available for edit and/or selection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PONNOREAY PICH whose telephone number is (571)272-7962. The examiner can normally be reached on 9:00am-4:30pm Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ponnoreay Pich/  
Primary Examiner, Art Unit 2435